

AMENDMENTS

IN THE CLAIMS:

Please amend claims 1 and 20 as provided below:

1. (Currently Amended) Method for selecting frequency channels in a wireless communication system by a data transmission method that uses a frequency hopping method, comprising:

determining an existence of interference on a frequency channel, comprising:

(a) incrementing a counter each time an erroneous transmission on the frequency channel is identified;

(b) decrementing the counter each time an error-free transmission on the frequency channel is identified;

repeating the acts of (a) and (b) until the counter exceeds a maximum count; and

eliminating the frequency channel from a frequency hopping sequence when the counter exceeds the maximum count;

reinserting the frequency channel into the frequency hopping sequence, comprising:

(c) decrementing the counter each time an error free transmission on the frequency channel is identified;

(d) setting the counter to the maximum count each time an erroneous transmission on the frequency channel is identified;

repeating acts (c) and (d) until the counter reaches a minimum count; and

reinserting the frequency channel into the frequency hopping sequence when the counter has reached the minimum count.

2. (Cancelled).

3. (Cancelled).

4. (Previously presented) The method of Claim 1, wherein detecting an erroneous transmission further comprises using checksums that are added to block-transmitted data at an end thereof.

5. (Original) The method of Claim 4, wherein using checksums comprises adding a CRC (Cyclic Redundancy Check) code to each data block at the end thereof.

6. (Cancelled).

7. (Cancelled).

8. (Cancelled).

9. (Cancelled).

10.(Cancelled).

11. (Original) A method for data transmission between at least two stations via radio links using the frequency hopping method and the frequency channel selection method of Claim 1.

12. (Original) The method of Claim 11 wherein the method is based on one of the transmission standards Bluetooth, WDCT, DECT or HomeRF.

13. (Cancelled).

14. (Cancelled).

15. (Cancelled).

16. (Cancelled).

17. (Cancelled).

18. (Previously Presented) The method of claim 1, wherein re-inserting the frequency channel further comprises:

measuring an interference signal strength associated with the frequency channel; and

determining that interference no longer exists on the frequency channel when the measured interference signal strength is less than a predetermined amount.

19. (Previously presented) The method of claim 18, wherein determining that interference no longer exists further comprises:

decrementing a counter when the measured signal strength is less than a predetermined threshold;

comparing a count of the counter to a predetermined value; and

determining that interference no longer exists when the count is less than or equal to the predetermined value.

20. (Currently Amended) A method for selecting frequency channels associated with a frequency hopping sequence in a wireless communication system, comprising:

characterizing a frequency channel of the frequency hopping sequence by incrementing a counter when an erroneous transmission on the frequency channel is identified and decrementing the counter when an error-free transmission on the frequency channel is identified;

selectively eliminating the frequency channel from the frequency hopping sequence based on whether the counter exceeds a maximum count;

characterizing an eliminated frequency channel by setting the counter to the maximum count ~~when~~each time an erroneous transmission on the eliminated frequency channel is identified and decrementing the counter when an error free transmission on the eliminated frequency channel is identified; and

selectively reinserting the eliminated frequency channel into the frequency hopping sequence based on whether the counter has reached a minimum count.